6GE5

Beam Power Tube

DUODECAR TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:			
Voltage (AC or DC)	6.3 ± 0.6		volts
Current at heater volts = 6.3	1.200		amp
Peak heater-cathode voltage:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[a]	max.	volts
Direct Interelectrode Capacitances (Approx.):[b]			
Grid No. 1 to plate	0.34		pf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	16.0		pf
Plate to cathode & grid No.3, grid No.2, and heater	7.0		pf

Characteristics, Class A_1 Amplifier:

Plate Voltage	60	150	250	5000	volts
Grid-No.2 Voltage	150	150	150	150	volts
Grid-No.1 Voltage	0	-22.5	-22.5	-	volts
Mu-Factor, Grid No.2 to Grid No.1	-	4.4	-	-	
Plate Resistance (Approx.)	-	-	18000	-	ohms
Transconductance	-	-	7300	-	µmhos
Plate Current	345[c]	-	65	-	ma
Grid-No.2 Current	27[c]	-	1.8	-	ma
Grid-No.1 Voltage (Approx.) for plate ma.= 1	-	-	-42	-100	volts

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2.875"
Seated Length	2.250" to 2.500"
Diameter	1.437" to 1.563"
Bulb	T12
Base	Large-Button Duodecar 12-Pin (JEDEC No.E12-74)
Basing Designation for BOTTOM VIEW	12BJ

Pin 1 - Heater
Pin 2 - Grid No.2
Pin 3 - Grid No.1
Pin 4 - Cathode, Grid No.3
Pin 5 - Do Not Use[d]
Pin 6 - Do Not Use[d]
Pin 7 - Plate
Pin 8 - Do Not Use[d]
Pin 9 - Do Not Use[d]
Pin 10 - Cathode, Grid No.3
Pin 11 - Grid No.1
Pin 12 - Heater

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HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[e]

DC PLATE-SUPPLY VOLTAGE	770 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE[f]	6500 max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	220 max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE	-55 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	330 max.	volts
CATHODE CURRENT:		
Peak	550 max.	ma
Average	175 max.	ma
GRID-No.2 INPUT	3.5 max.	watts
PLATE DISSIPATION[g]	17.5 max.	watts
BULB TEMPERATURE (At hottest point on bulb surface)	220 max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For grid resistor-bias operation	1 max.	megohm

[a] The dc component must not exceed 100 volts.

[b] Without external shield.

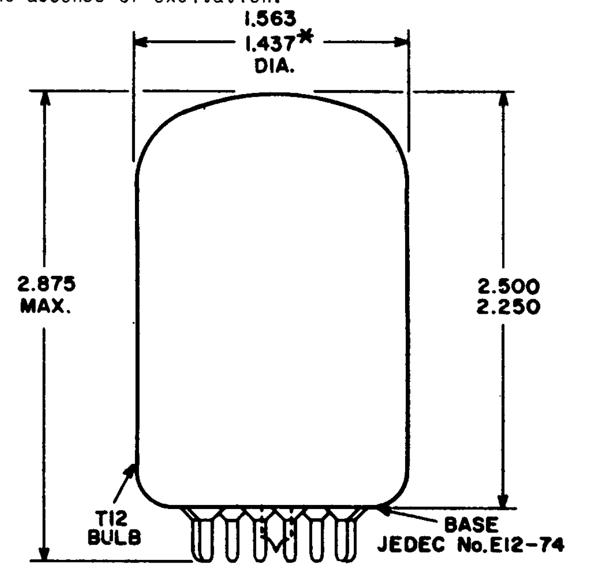
[c] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

[d] Socket terminals 5,6,8, and 9 should not be used as tie points.

[e] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

[f] This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

[g] An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



ALL DIMENSIONS IN INCHES

*APPLIES TO MINIMUM DIAMETER EXCEPT IN THE AREA OF THE SEAL.